

Optimization of New Member Registration Services Through a Web-Based System Using the RAD Method at CU Keling Kumang BO Karangen

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Abstract

Keling Kumang Credit Union (CU) in Karangen is a cooperative-based financial institution that provides membership services to the public. The conventional new member registration process makes data management ineffective and time-consuming. Therefore, a web-based information system is needed to optimize the new member registration process. The method used in developing this system is Rapid Application Development (RAD), which consists of requirements planning, design, construction, and implementation. Data collection techniques used in this study included observation, interviews, and literature review. The system was built using the Laravel framework, the PHP programming language, and a MySQL database. The results show that the E-Kelimang system facilitates prospective members in registering online, uploading required documents, and assists the administrator in verifying and managing member data. This system makes the member registration process more effective, efficient, and organized, and improves the quality of service at Keling Kumang Credit Union (CU) in Karangen.

Keywords: Information System, Member Registration, Laravel, MySQL, Rapid Application Development (RAD), E-Kelimang.

1. Introduction

Along with the rapid development of information technology, the demand for website-based applications continues to increase. Websites have become a widely used solution because they provide easy access to information and services quickly, flexibly, and can be accessed anytime and anywhere via the internet. Furthermore, the use of web-based applications is considered more efficient because they do not require special installation on the user's device; simply using a browser to access the available system. [1] technology is developing increasingly rapidly, affecting almost all aspects of human life, both directly and indirectly. Technological systems have become crucial due to globalization and rapid demand. Web-based information systems are also widely used by organizations and government agencies. The business environment is inextricably linked to information systems technology, which facilitates work. With today's rapid technological advancements and the support of adequate resources, more and more activities are utilizing information systems, making work easier [2]. Then we will call this web-based information system "E-KELIMANG" (Electronic Keling Kumang Member Mandiri)

2. Theoretical Review

2.1. Definition of Implementation

Implementation is the provision of means to carry out something that has an impact or consequence on something [3]. Implementation is the process of applying a system, method, or design that has been created into a real form so that it can be used and function according to the expected goals.

2.2. Understanding Systems

System can be defined as a collection of subsystems, components, or elements that work together to achieve a predetermined output [4]. According to [5], System is a collection of components that are interconnected and work with each other according to procedures to achieve a goal.

2.3. Understanding MySQL

According to [6] MySQL is an open-source Database Management System (DBMS) that supports multi-user and multi-threaded use, is popular, and free. Based on this, SQL can be defined as a language used to query, create, and manipulate data in a database.

2.4. Understanding PHP

According to [7] PHP is a server-side programming language that is used to process and translate program code into a form that can be understood by computers, and can be integrated with HTML in developing web applications.

2.5. Understanding Laravel

According to [8], a framework is a tool used in web development to assist and simplify the developer's work. Using a framework speeds up the code writing process and results in a neater and more organized web structure. Currently, many frameworks have been created by programmers to simplify the development of information systems. According to [9] Laravel is a PHP-based web application framework that is open source and uses the MVC (Model-View-Controller).

3. Interface design

In the Interface Design section, the researcher created the website display as follows:



Fig.1: Front End Page View



Formulir Menjadi Anggota CU Keling Kumang

Data Pribadi

Nama Lengkap *

No. KTP *

16 digit angka

Fig.2: Member Registration display structure

Jenis Kelamin * Agama * Tempat Lahir * Tanggal Lahir *

- Pilih - - Pilih - dd / mm / yyyy

No. HP / WhatsApp * Email

08xxxxxxxxx contoh@email.com

Pendidikan & Pekerjaan

Tingkat Pendidikan * Pekerjaan * Penghasilan Per Bulan *

- Pilih - - Pilih - - Pilih -

Jenis Keanggotaan & Simpanan

Jenis Keanggotaan *

Anggota Penuh Anggota Tidak Penuh

Pilihan Simpanan (boleh pilih lebih dari satu)

Fig.3: Member Registration display structure

Siska-BA Simpar Peridi S-Lansia

Taken Wisata Tanera Takan

Taroh Permata Philantropic Simpanan Lain

Alamat

Alamat Lengkap *

Jalan, RT/RW, Nomor Rumah

Desa Kecamatan Kode Pos

Fig.4: Member Registration display structure

Data Keluarga

Nama Ibu Kandung * Status Pernikahan *

- Pilih -

Ahli Waris 1

Nama Ahli Waris 1 Hubungan No. HP Ahli Waris 1

Nama lengkap - Pilih - 08xxxxxxxxx

Upload Dokumen

Foto KTP / Akte Lahir * Kartu Keluarga * Pas Foto *

Browse... No file selected. Browse... No file selected. Browse... No file selected.

JPG/PNG/PDF, maks 2MB JPG/PNG/PDF, maks 2MB Latar biru/merah, 3x4 atau 4x6

Fig.5: Member Registration display structure

Saya menyatakan data yang diisi benar dan bersedia mematuhi seluruh ketentuan CU Keling Kumang.

Saya menyetujui Syarat & Ketentuan *

DAFTAR SEKARANG

Verifikasi data: 1x24 jam. Konfirmasi via WhatsApp/Email.

Fig.6: Member Registration display structure



Selamat Datang E-Kelimang

Credit Union kami hadir untuk mewujudkan kesejahteraan anggota melalui simpan pinjam yang transparan, aman, dan berorientasi pada solidaritas bersama.

Username
admin1

Password
.....

Masuk

Fig.7: Admin login display structure

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- [Beranda](#)
- [Data Anggota](#)
- [Data Berita](#)
- [Data Laporan](#)
- [Manfaat Anggota](#)
- [Profil Kami](#)
- [Data Pesan](#)
- [Data User](#)
- [Profil Sistem](#)
- [Keluar](#)

Selamat Datang di Halaman Administrator admin1

E-Kelimang Credit Union kami hadir untuk mewujudkan kesejahteraan anggota melalui simpan pinjam yang transparan, aman, dan berorientasi pada solidaritas bersama.

Data Statistik Anggota CU Keling Kumang

Anggota Aktif

1

Anggota Terverifikasi & Aktif

Menunggu Verifikasi

0

Pendaftaran Belum Diverifikasi

Anggota Tidak Aktif

1

Anggota Tidak aktif / Keluar

Total Seluruh Anggota

3

Sesuai Status Anggota

Anggota Baru Bulan Ini

3

Pendaftaran Baru May 2026

Ditolak / Diberhentikan

1

Anggota Ditolak atau Diberhentikan

Data Riwayat Pendaftaran Anggota Terbaru

NO	NAMA ANGGOTA	NO. KTP	TANGGAL DAFTAR	STATUS	PROSES
Belum ada data pendaftaran anggota.					

Fig.8: Admin page display structure

4. Conclusion

Based on the results of research and development of the website-based E-Kelimang (Electronic Keling Kumang Independent Member) system using the Rapid Application Development (RAD) method at CU Keling Kumang BO Karangan, it can be concluded that the system developed using the Laravel framework with MVC (Model-View-Controller) architecture successfully optimized the new member registration process. This system is able to replace the manual registration process that previously required the physical presence of prospective members into a digital-based process that can be accessed anytime and anywhere via the internet network, so that the CU Keling Kumang registration service becomes more effective, efficient, and organized.

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